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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.       | CONFIRMATION NO.       |
|---|-------------|----------------------|---------------------------|------------------------|
| 10/663,209  | 09/16/2003  | Donald A. Baines     | Agere-6 (Baines 1-3-7)    | 2357                   |
| 26479 7590 02/18/2009<br>STRAUB & POKOTYLO<br>788 Shrewsbury Avenue<br>TINTON FALLS, NJ 07724 |             |                      | EXAMINER<br>PHAM, TAMMY T |                        |
|   |             |                      | ART UNIT<br>2629          | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>02/18/2009   | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                               |                               |  |
|------------------------------|-------------------------------|-------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/663,209 | Applicant(s)<br>BAINES ET AL. |  |
|                              | Examiner<br>TAMMY PHAM        | Art Unit<br>2629              |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-8, 11-17, 20-24, 26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-8, 11-17, 20-24, 26-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 December 2008 has been entered.

***Response to Amendment***

2. Claim 1, 9-10, 18-19, 25 have been cancelled. Claims 2-8, 11-17, 20-24, 26-27 are pending.

***Response to Arguments***

3. Applicant's arguments filed 4 April 2008 have been fully considered but they are moot in view of the new grounds of rejection.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-6, 8, 11-17, 20-24, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over KNEE et al. (US Patent No: 5,994,710) in view of Montgomery et al. (US Patent No: 4,797,544) and Hudler (U.S. Patent No.: 4,281,243).

5. **As for independent claims 6, 12**, KNEE teaches of a method comprising:

6. capturing a plurality of image parts (column 3, lines 37-38);
7. determining position information corresponding to each of the plurality of image parts;  
and
8. generating image information using, at least, the plurality of image parts and the corresponding position information (column 12, lines 49-53);
9. wherein the act of capturing a plurality of image parts includes focusing light (Fig. 1, item 2) reflected from a surface (Fig. 1, item 5) onto an image pickup device (Fig. 1, item 10, column 6, lines 18-20);
10. wherein the act of determining position information includes accepting, by the image pickup device (Fig. 1, item 10), light reflected from the surface (Fig. 1, item 5),
11. wherein the light reflected from the surface (Fig. 1, item 5) is emitted from a first light source (Fig. 1, item 2, column 6, lines 30-33);

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12. wherein the light source emit light that illuminates a surface (Fig. 1); and
13. wherein the light emitted from the first light source (Fig. 1, item 2) and reflected from the surface (Fig. 1, item 5) onto the image pickup device (Fig. 1, item 10) is used in the act of capturing a plurality of image parts (column 6, lines 10-15) and determining position information (column 6, lines 30-33).
14. KNEE fails to teach of a second light source, and that the second light determines position information (while the first light source captures a plurality of image parts),
15. wherein the second light source emit light that illuminates a surface; and
16. wherein the first light source (image capturer) has a larger angle of incidence with the surface than the second light source (position detector).
17. Montgomery teaches of a second light source (Fig. 6, item 151) that determines position information;
18. wherein the second light source emit light that illuminates a surface (column 5, lines 38-31).
19. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include a second light source of Montgomery which emits light that illuminates a surface and also determines position information, with the capturing device of KNEE in order to

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have each light source provide a unique purpose in the overall scheme of the mouse. The advantage of having each light source provide a different purpose or function to the mouse is that this allows greater flexibility in the design of the mouse, since each light source may be adjusted accordingly in order to better carry out its unique purpose (Montgomery, column 1, lines 50-55).

20. Hudler teaches that the image capturer (Fig. 1, item 4) has a larger angle of incidence with the surface (Fig. 1, item 1) than the position detector (Fig. 1, item 3).

21. It would have been obvious to one with ordinary skill in the art at the time the invention was made to have the position detector of Montgomery and the image capturer of Knee be arranged as Hudler, with the image capturer has a larger angle of incidence. The benefits of this arrangement is that is allows the image capturer to have an optimum image of the captured image (Hudler, column 3, lines 15-18).

22. **As for independent claims 8, 24**, in addition to the claim limitations of claim 6 as analyzed above; KNEE further teaches that the act of determining position information includes focusing light reflected from the surface (Fig. 1, item 5) onto a second image pickup device (Fig. 2c, item 30, column 11, lines 25-30).

23. **As for claims 2, 3**, KNEE teaches that the position information includes coordinate information (column 12, lines 49-53) {claim 2}; and change of position information (column 11, line 64) {claim 3}.

24. **As for claims 13-17**, KNEE teaches that the position information includes coordinate information (column 12, lines 49-53) {claim 13}; change of position information (column 11, line 64) {claim 14}; orientation information {claim 15}; acceleration information {claim 16} and velocity information {claim 17} in column 1, lines 40-45.

25. **As for claims 21, 22, 23**, KNEE as modified above by Montgomery teaches that the second light source is a light emitting diode {claim 21}; infra-red light emitting diode {claim 22} tunable light source able to modulate at least one of wavelength, polarization, and amplitude {claim 23} (KNEE: column 5, lines 20-25).

26. **As for claims 26, 27**, KNEE teaches that the image parts (not shown) are captured from a paper document (Fig. 1, on item 5, column 5, lines 33) and wherein the act of generating image information using, at least, the plurality of image parts (not shown) and the corresponding position information uses the image parts (Id.) to compose a larger image (column 6, lines 53-60)

*Conclusion*

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy Pham whose telephone number is (571) 272-7773. The examiner can normally be reached on 8:00-5:30 (Mon-Fri).

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TP  
5 February 2009

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